MEMORANDUM OF UNDERSTANDING

for establishing the

COOPERATIVE ECOSYSTEM STUDIES UNITS NETWORK

between the

DEPARTMENT OF THE INTERIOR
Bureau of Land Management
U.S. Bureau of Reclamation
U.S. Geological Survey
National Park Service

U.S. DEPARTMENT OF AGRICULTURE
U.S. Forest Service

U.S. DEPARTMENT OF ENERGY

I. INTRODUCTION

Background
Management and stewardship of the nation's lands and waters requires skillful public service supported by sound science. To help meet these needs, a network of Cooperative Ecosystem Studies Units (CESUs) is being established. CESUs provide research, technical assistance and education to federal land management, environmental and research agencies and their potential partners. CESUs are organized around biogeographic areas. Their broad scope includes the biological, physical, and cultural sciences needed to address critical natural and cultural resource management and stewardship issues. Each CESU includes several federal agencies, a host university, partner universities and other institutions.

Mission
The mission of the Cooperative Ecosystems Studies Unit Network is to promote and provide research, technical assistance and education to federal land management, environmental and research agencies through CESUs.

II. OBJECTIVES

The objectives of the CESU Network are to:

- provide resource managers with high-quality scientific research, technical assistance and education,

- deliver research and technical assistance that is timely, relevant to resource managers and needed to develop and implement sound resource management and stewardship approaches,

- create and maintain effective partnerships among federal agencies and universities to share resources and expertise,

- take full advantage of scientific and technical capabilities and expertise at the participating institutions while benefiting faculty, staff and students at these institutions,

- encourage professional development of federal scientists, and

- manage federal science resources efficiently and cost-effectively.

III. AUTHORITIES

This MOU is entered into by the following agencies consistent with the mission and any other authorities promoting science cooperation for each agency.

Bureau of Land Management (BLM)

The BLM administers public lands within a framework of numerous laws. The most comprehensive of these is the Federal Land Policy and Management Act of 1976 (FLPMA). All Bureau policies, procedures and management actions must be consistent with FLPMA and the other laws that govern use of the public lands. It is the mission of the Bureau of Land Management to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations (43 U.S.C. 1701 et seq.). Specifically, 43 U.S.C., Sec. 307 (a) authorizes the BLM to conduct investigations, studies, and experiments, on its own initiative or in cooperation with others, involving the management, protection, development, acquisition, and conveying of the public lands.

National Park Service (NPS)

The NPS is responsible for the management of areas in the National Park System to conserve the scenery, the natural and historic objects, and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations (16 U.S.C. 1 et seq.). In addition, 16 U.S.C. 5933 authorizes the NPS to enter into cooperative agreements with colleges and universities, including but not limited to land grant schools, in partnership with other federal and state agencies, to establish cooperative study units to conduct multi-disciplinary research and develop integrated information products on the resources of the National Park System, or the larger region of which parks are a part.

U.S. Bureau of Reclamation (USBR)

The USBR manages, develops, and protects water and related resources in an environmentally and economically sound manner in the interest of the American public (43 U.S.C. Chapter 12).

U.S. Geological Survey (USGS)
The USGS's mission is to provide reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water; biological, energy, and mineral resources; and enhance and protect our quality of life. The USGS is authorized to cooperate with other agencies under 43 U.S.C. Chapter 2.36(c).

U.S. Department of Energy (DOE)
The DOE's mission is to ensure the energy security of this nation, maintain the safety, security and reliability of the U. S. nuclear weapons stockpile, clean up the environment from the legacy of the Cold War, and support basic and strategic energy-related research and development, including environmental research in support of the Department's mission. DOE's statutory authority to sign this Memorandum of Understanding is provided in Public Law 93-91, U.S. Department of Energy Organization Act.

U.S. Forest Service (USFS)
The USFS mission is to achieve quality land management under the sustainable multiple-use management concept to meet the diverse needs of the people (16 U.S.C 1641-1646). In accordance with P.L. 95-113 and 7 U.S.C. 3318, 3319 and 3152, the USFS is authorized to enter into joint venture agreements with an entity or individual to serve the mutual interest of the parties in agriculture research, extension, and teaching activities.

IV. STATEMENT OF MUTUAL BENEFITS AND INTERESTS

Participating agencies have the following mutual benefits and interests associated with CESUs:

- a broadened scope of scientific services for federal agencies,
- increased technical assistance to resource and environmental managers,
- additional scientific resources and opportunities for universities, and
- increased diversity of research scientists and institutions.

V. CESU COORDINATING COUNCIL

Membership
There is hereby established the CESU Coordinating Council (Council) consisting of representatives from each of the following agencies:

- Bureau of Land Management
- Department of Energy
- National Park Service
- U.S. Bureau of Reclamation
- U.S. Forest Service
- U.S. Geological Survey

Additional agencies may become members of the Council upon formal participation in at least one CESU and after their agency head has signed this Memorandum of Understanding. Should an agency no longer participate in a CESU, Council membership and responsibilities are vacated.

Role and Responsibilities

The Council will develop and serve as a forum for coordination and implementation of the CESU network. In doing so, the Council will:

- prepare guidelines for agencies, universities, and other partners to participate in the CESU Network consistent with the attached CESU Concept Paper,
- assist individual CESUs in developing agreements and subsequent modifications,
- maintain networks for communication and data-sharing among CESUs,
- develop additional funding sources for the CESU Network,
- develop and implement a comprehensive strategic plan for the growth and development of the CESU Network,
- select additional biogeographic areas, conduct necessary CESU selection competitions, and select host universities,
- produce an annual report summarizing CESU Network activities,
- encourage its members to take appropriate actions for the CESU Network within the limits of their respective authorities, policies, and budget,
- evaluate the CESU Network on a regular basis to determine how effectively objectives are being met, and
- other activities in support of the CESU Network.

Working Groups

Working Groups will be formed as needed to work to plan, coordinate, and facilitate implementation of actions developed by the Council, within existing authority, policy review, and budgets. Working Groups may be formed or disbanded as needed, at the discretion of the Council. Working Groups will report regularly to the Council on their deliberations.

VI. THE COOPERATORS AGREE TO THE FOLLOWING:

1. Assign agency representative(s) to serve on CESU Coordinating Council.

2. Fully support, and work to expand, the CESU Network within the missions and authorities of the participating agencies.

3. Develop necessary administrative procedures and guidelines for the CESU Network, including, but not limited to roles and responsibilities of CESU Coordinating Council, reporting dates, expected products, within 6 months of the effective date of the MOU.

4. Develop a comprehensive strategic plan for growth and development of CESU Network within 12 months of the effective date of the MOU.

5. Develop, on an annual basis, a summary CESU Network activities.

6. Provide technical assistance to partners in individual CESUs, as requested, available and appropriate.

7. Facilitate interagency agreements, when necessary, to allow full access to the resources of the CESU Network for all participating agencies.

8. Support an independent peer-review of the CESU network within 5 years of the effective date of this MOU.

VII. IT IS MUTALLY AGREED AND UNDERSTOOD BY AND BETWEEN THE COOPERATORS THAT:

1. This MOU in no way restricts participants from involvement in similar activities with other public and private agencies, organizations, and individuals. This includes separate cooperative agreements with universities participating in the CESU Network.

2. Nothing in the MOU shall be construed as obligating agencies to expend funds or to provide resources or be involved in any obligation for future payment of money or provision of resources.

3. Amendment within the scope of this MOU shall be made by formal consent of all parties, by the issuance of a written amendment, signed and dated by the parties, prior to any changes becoming effective.

4. Any party(s), in writing, may terminate its instrument in whole, or in part, at any time before the date of expiration.

5. This instrument is neither a fiscal nor a funds-obligation document. Any endeavor involving reimbursement or contribution of funds between the parties to this instrument will be handled in accordance with applicable laws, regulations, and procedures including those for federal procurement, assistance, and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority.

6. The program or activities conducted under this Memorandum of Understanding will be in compliance with the nondiscrimination provisions in Title VI and VII of the Civil Rights Act of 1964, as amended; the Civil Rights Restoration Act of 1987 (P.L. 100-259); and other nondiscrimination statues; namely, Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, and the Age Discrimination Act of 1975.

7. No member of, or Delegate to, Congress shall be admitted to any share or part of this instrument, or any benefits that may arise therefrom.

8. This instrument expires no later than six years from the effective date, at which time it is subject to review, renewal, or expiration.

VIII. EFFECTIVE DATE

IN WITNESS WHEREOF, the parties hereto have entered into this Memorandum of Understanding as evidenced by their signatures below. The Memorandum of Understanding is effective upon the date of the second signature.

DEPARTMENT OF THE INTERIOR

_____

Tom Fry, Director Date
Bureau of Land Management

_____

Charles Groat, Director Date
U.S. Geological Survey

_____

Robert Stanton, Director Date
National Park Service

_____

Eluid Martinez, Commissioner Date
U.S. Bureau of Reclamation

U.S. DEPARTMENT OF AGRICULTURE

_____

Mike Dombeck, Chief Date
U.S. Forest Service

U.S. DEPARTMENT OF ENERGY

_____

Martha Krebs, Director Date
Office of Science

Amendment 00-1

AMENDMENT TO MEMORANDUM OF UNDERSTANDING

for establishing the

COOPERATIVE ECOSYSTEM STUDIES UNITS NETWORK

I. INTRODUCTION

It is mutually agreed on and understood by and between the parties to the Memorandum of Understanding (MOU) that additional agencies may become members of the Council upon formal participation in at least one CESU and after their agency head or designated representative has signed this Amendment to the MOU.

II. AUTHORITIES

This MOU is entered into by the following agency consistent with the mission and relevant authorities described below.

U.S. Environmental Protection Agency (EPA)

The EPA's mission is to protect public health and to safeguard and improve the natural environment - air, water, and land upon which life depends. EPA's purpose is to ensure that: Federal environmental laws are implemented and enforced fairly and effectively; environmental protection is an integral consideration in U.S. policies concerning economic growth, energy, transportation, agriculture, industry, international trade, and natural resources; and that national efforts to reduce environmental risk are based on the best available scientific information. The EPA is authorized to cooperate with other agencies in accordance with section 103 of the Clean Air Act (42 U.S.C. 7403), section 104 of the Clean Water Act (33 U.S.C. 1254(b)), section 10 of the Toxic Substances Control Act (15 U.S.C. 2609) and section 202 of the Federal Insecticide, Fungicide, and Rodenticide Act (U.S.C. 6-136r(a)).

III. CESU COORDINATING COUNCIL

The joining agency is now a full member of the CESU Coordinating Council. The agency is now authorized to send a voting/formal representative to Council meetings, and to participate in all actions of the Council.

IV. EFFECTIVE DATE

IN WITNESS THEREOF, the party hereto has entered into the Memorandum of Understanding with this Amendment as evidenced by their signature below. The Amendment to the Memorandum of Understanding is effective upon the date of the signature.

U.S. Environmental Protection Agency

_____

Norine Noonan, Assistant Administrator Date
Office of Research and Development

Amendment 00-2

AMENDMENT TO MEMORANDUM OF UNDERSTANDING

for establishing the

COOPERATIVE ECOSYSTEM STUDIES UNITS NETWORK

I. INTRODUCTION

It is mutually agreed on and understood by and between the parties to the Memorandum of Understanding (MOU) that additional agencies may become members of the Council upon formal participation in at least one CESU and after their agency head or designated representative has signed this Amendment to the MOU.

II. AUTHORITIES

This MOU is entered into by the following agency consistent with the mission and relevant authorities described below.

Department of Defense (DoD)

The Department of Defense manages nearly 25 million acres of land, and the natural and cultural resources found there. DoD's primary mission is national defense. DoD's conservation program supports this mission by ensuring realistic training areas, and managing its resources in ways that maximize available land, air, and water training opportunities. DoD environmental stewardship activities are authorized under the Sikes Act, as amended. In accordance with 16 U.S.C. 670, as amended, the DoD is authorized to cooperate with other agencies.

III. CESU COORDINATING COUNCIL

The joining agency is now a full member of the CESU Coordinating Council. The agency is now authorized to send a voting/formal representative to Council meetings, and to participate in all actions of the Council.

IV. EFFECTIVE DATE

IN WITNESS THEREOF, the party hereto has entered into the Memorandum of Understanding with this Amendment as evidenced by their signature below. The Amendment to the Memorandum of Understanding is effective upon the date of the signature.

Department of Defense

_____

Sherri W. Goodman Date
Deputy Under Secretary of Defense
(Environmental Security)

Amendment 01-1

AMENDMENT TO MEMORANDUM OF UNDERSTANDING

for establishing the

COOPERATIVE ECOSYSTEM STUDIES UNITS NETWORK

I. INTRODUCTION

It is mutually agreed on and understood by and between the parties to the Memorandum of Understanding (MOU) that additional agencies may become members of the Council upon formal participation in at least one CESU and after their agency head or designated representative has signed this Amendment to the MOU.

II. AUTHORITIES

This MOU is entered into by the following agency consistent with the mission and relevant authorities described below.

U.S. Fish and Wildlife Service (USFWS)
The USFWS, working with others, is responsible for conserving, protecting, and enhancing fish, wildlife, plants and their habitats for the continuing benefit of the American people through Federal programs related to migratory birds, endangered species, interjurisdictional fish and marine mammals, and inland sport fisheries. In accordance with 16 U.S.C. 742f, the USFWS is authorized to cooperate with other agencies.

III. CESU COORDINATING COUNCIL

The joining agency is now a full member of the CESU Coordinating Council. The agency is now authorized to send a voting/formal representative to Council meetings, and to participate in all actions of the Council.

IV. EFFECTIVE DATE

IN WITNESS THEREOF, the party hereto has entered into the Memorandum of Understanding with this Amendment as evidenced by their signature below. The Amendment to the Memorandum of Understanding is effective upon the date of the signature.

U.S. Fish and Wildlife Service

_____

Jamie Rappaport Clark Date
Director

Amendment 01-2

AMENDMENT TO MEMORANDUM OF UNDERSTANDING

for establishing the

COOPERATIVE ECOSYSTEM STUDIES UNITS NETWORK

I. INTRODUCTION

It is mutually agreed on and understood by and between the parties to the Memorandum of Understanding (MOU) that additional agencies may become members of the Council upon formal participation in at least one CESU and after their agency head or designated representative has signed this Amendment to the MOU.

II. AUTHORITIES

This MOU is entered into by the following agency consistent with the mission and relevant authorities described below.

National Aeronautics and Space Administration (NASA)
Among NASA's missions is the utilization of aeronautical and space activities for scientific purposes, encompassing research designed to expand knowledge of the Earth, its resources, and the effects of climatic change on the transformation of its ecological systems. In addition, NASA is responsible for the environmental stewardship of the land, water, and wildlife resources under its control. In accordance with Section 203(c) of the National Aeronautics and Space Act of 1958, as amended, 42 U.S.C. 2473(c), NASA is authorized to cooperate with other agencies.

III. CESU COORDINATING COUNCIL

The joining agency is now a full member of the CESU Coordinating Council. The agency is now authorized to send a voting/formal representative to Council meetings, and to participate in all actions of the Council.

IV. EFFECTIVE DATE

IN WITNESS THEREOF, the party hereto has entered into the Memorandum of Understanding with this Amendment as evidenced by their signature below. The Amendment to the Memorandum of Understanding is effective upon the date of the signature.

The National Aeronautics and Space Administration

_____

Jeffrey E. Sutton Date
Associate Administrator
for Management Systems

Amendment 02-1

AMENDMENT TO MEMORANDUM OF UNDERSTANDING

for establishing the

COOPERATIVE ECOSYSTEM STUDIES UNITS NETWORK

I. INTRODUCTION

It is mutually agreed on and understood by and between the parties to the Memorandum of Understanding (MOU) that additional agencies may become members of the Council upon formal participation in at least one CESU and after their agency head or designated representative has signed this Amendment to the MOU.

II. AUTHORITIES

This MOU is entered into by the following agency consistent with the mission and relevant authorities described below.

Natural Resources Conservation Service (NRCS)
The Natural Resources Conservation Service (NRCS) provides technical assistance to farmers, ranchers, and other private landowners in managing soil, water, animal, plant, air and human resources. NRCS scientists and technical specialists identify appropriate technologies in research and development and transfer them to field staff for implementation. Under P.L. 74-46, 49 Stat. 163, 16 U.S.C. 590 (a-f), NRCS has the authority to cooperate or enter into agreements with other Federal agencies, private entities, or individuals, or an entity regarding the conservation, development, and productive use of the Nation's natural resources.

III. CESU COORDINATING COUNCIL

The joining agency is now a full member of the CESU Coordinating Council. The agency is now authorized to send a voting/formal representative to Council meetings, and to participate in all actions of the Council.

IV. EFFECTIVE DATE

IN WITNESS THEREOF, the party hereto has entered into the Memorandum of Understanding with this Amendment as evidenced by their signature below. The Amendment to the Memorandum of Understanding is effective upon the date of the signature.

The Natural Resources Conservation Service (A-3A75-2-51)

_____

Pearlie S. Reed Date
Chief

Amendment 02-3

AMENDMENT TO MEMORANDUM OF UNDERSTANDING

for establishing the

COOPERATIVE ECOSYSTEM STUDIES UNITS NETWORK

I. INTRODUCTION

It is mutually agreed on and understood by and between the parties to the Memorandum of Understanding (MOU) that additional agencies may become members of the Council upon formal participation in at least one CESU and after their agency head or designated representative has signed this Amendment to the MOU.

II. AUTHORITIES

This MOU is entered into by the following agency consistent with the mission and relevant authorities described below.

United States Department of Agriculture, Agricultural Research Service (USDA-ARS)

The Agricultural Research Service (ARS) is the principal in-house research agency of the U.S. Department of Agricultural (USDA). ARS, one of the Research, Education and Economics (REE) agencies, is charged with extending the Nation's scientific knowledge across a broad range of program areas that affect the American people on a daily basis. ARS Research is organized into 22 National Programs that are classified under three major groups: Animal Production, Product Value and Safety; Natural Resources and Sustainable Agricultural Systems; and Crop Production, Product Value and Safety. These programs serve to bring coordination, communication and empowerment to the more than 1200 research projects carried out by ARS. The National Programs focus efforts on the relevance, impact, and quality of ARS research.

Part of Natural Resources and Sustainable Agricultural Systems is focused on the development and transfer of economically sustainable technologies and integrated management strategies, based on fundamental knowledge of ecological processes, that conserve and enhance the Nation's diverse natural resources of rangeland. In accordance with 7 U.S.C. 3318 the USDA, ARS authorized to cooperate with other agencies.

III. CESU COORDINATING COUNCIL

The joining agency is now a full member of the CESU Coordinating Council. The agency is now authorized to send a voting/formal representative to Council meetings, and to participate in all actions of the Council.

IV. EFFECTIVE DATE

IN WITNESS THEREOF, the party hereto has entered into the Memorandum of Understanding with this Amendment as evidenced by their signature below. The Amendment to the Memorandum of Understanding is effective upon the date of the signature.

USDA, AGRICULTURAL RESEARCH SERVICE

_____ _____

Edward B. Knipling, Date
Acting Administrator

Amendment #02-2

AMENDMENT TO MEMORANDUM OF UNDERSTANDING

for establishing the

COOPERATIVE ECOSYSTEM STUDIES UNITS NETWORK

I. INTRODUCTION

It is mutually agreed on and understood by and between the parties to the Memorandum of Understanding (MOU) that additional agencies may become members of the Council upon formal participation in at least one CESU and after their agency head or designated representative has signed this Amendment to the MOU.

II. AUTHORITIES

This MOU is entered into by the following agency consistent with the mission and relevant authorities described below.

National Marine Fisheries Service

The National Marine Fisheries Service is responsible for stewardship of living marine resources for the benefit of the nation through their science-based conservation and management and promotion of the health of their environment. Under 16 U.S.C. 661, National Marine Fisheries Service has the authority to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations.

III. CESU COORDINATING COUNCIL

The joining agency is now a full member of the CESU Coordinating Council. The agency is now authorized to send a voting/formal representative to Council meetings, and to participate in all actions of the Council.

IV. EFFECTIVE DATE

IN WITNESS THEREOF, the party hereto has entered into the Memorandum of Understanding with this Amendment as evidenced by their signature below. The Amendment to the Memorandum of Understanding is effective upon the date of the signature.

National Marine Fisheries Service

_____ _____

William T. Hogarth, Ph.D. Date
Assistant Administrator for Fisheries